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| EXAMINER |
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PIZIALI, JEFFREY J

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| ART UNIT | PAPER NUMBER |
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2629

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS | 04/19/2007 | PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/942,837

Applicant(s)

GETTEMY ET AL.

Examiner

Jeff Piziali

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3/15/06; 6/7/06; and 1/19/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 and 13-25 is/are pending in the application.
- 4a) Of the above claim(s) 4,7,14,16,20 and 23 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,6,8-11,13,15,17-19,21,22,24 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicants' election without traverse of Species 2B (i.e., claims 1-3, 5, 6, 8-11, 13, 15, 17-19, 21, 22, 24, and 25) in the reply filed on 19 January 2007 is acknowledged (see Page 7).
2. Claims 4, 7, 14, 16, 20, and 23 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected species and/or subspecies, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 19 January 2007.
3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Specification

4. The amendment filed 7 June 2006 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

"Electrical trace 431 and electrode 421 are separated by an insulator 422" (see Page 2 of the Supplemental Amendment and Response filed 7 June 2006); and

"Supporting structure 440, in the present embodiment of the invention, may be a rigid molded plastic such as PC, PC/ABS, or ABS and may form a perimeter frame around the top of the electrical device. Supporting structure 440 may be co-molded with outer film 410 to form a single-piece front cover assembly which may form the top surface of device 400. Supporting structure 440 will also provide some method of securely attaching the front cover assembly to a back cover assembly (not shown), thus forming a dust-proof and waterproof enclosure for the internal components of device 400" (see Page 3 of the Supplemental Amendment and Response filed 7 June 2006).

In particular, *"trace 431"* is not disclosed as an *"electrical trace"* in the original disclosure.

The original disclosure also does not teach separating *"trace 431"* and *"electrode 421"* with an *"insulator."*

Furthermore, although the newly added paragraph at page 14, line 9 of the instant specification (see Page 3 of the Supplemental Amendment and Response filed 7 June 2006) is similar to a paragraph found on page 12, lines 5-12 of the original disclosure. This newly added paragraph refers to a separate and distinct embodiment of the present invention.

Applicant is required to cancel the new matter in the reply to this Office Action.

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5. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicants' cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Drawings

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character not mentioned in the description: 422 (see Fig. 4, as well as the above objection to new matter in the disclosure).

Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference characters in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-3, 5, 6, 8-11, 13, 15, 17-19, 21, 22, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Suzuki (US 6,529,188 B1)* in view of *Conroy et al (US 5,686,705 A)*.

Regarding claim 1, Suzuki discloses a display assembly for an electronic device comprising: a display device [Fig. 10; 1]; a digitizer [Fig. 10; 4] (see Column 13, Line 50 - Column 14, Line 29) comprising a conductive film made of indium tin oxide [Fig. 5; 11] disposed above a digitizing element [Fig. 5; 22] (see Column 10, Lines 46-52), said conductive film capable of functioning in a non-planar surface (see Fig. 1A); and a single-piece three dimensional top cover [Fig. 1A; 4A] enclosing said electronic device and said digitizer [Fig. 1A; 11 and 12] and operable to allow mechanical transfer of external pressure to cause said conductive film to contact and activate said digitizing element responsive to said external pressure, wherein a point of contact on said single-piece three dimensional top cover is detected (see Fig. 12; Column 7, Line 42 - Column 8, Line 67). Although Suzuki teaches using conductive wires (see Column 10, Line 43 - Column 11, Line 16), Suzuki does not expressly disclose using a conductive polymer.

However, Conroy does disclose substituting conductive digitizer wires with a conductive polymer composite, such as conductive plastic (see Column 3, Lines 9-30, Column 4, Lines 21-32, Column 5, Line 55 - Column 6, Line 10, and Column 8, Lines 37-40). Suzuki and Conroy are analogous art, because they are from the shared field of manufacturing electronic touch panel devices. Therefore, it would have been obvious to one having ordinary skill in the art at the time

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of invention to use Conroy's conductive polymer in place of Suzuki's conductive film, so as to provide a rugged and reliable electronic device.

Regarding claim 2, Suzuki discloses said single-piece three dimensional top cover comprises a flexible thermoplastic outer film [Fig. 1A; 4A] having a three-dimensional top surface (see Column 10, Lines 46-52).

Regarding claim 3, Suzuki discloses said single-piece three dimensional top cover further comprises a supporting structure that is coupled to said flexible thermoplastic outer film [Fig. 1A; 4B] (see Column 7, Lines 42-57).

Regarding claim 5, Suzuki discloses said digitizer further comprises a plurality of electrodes and traces [Fig. 1A; 11 and 12] operable to register said point of contact when said conductive film makes contact with said digitizing element (see Column 7, Line 42 - Column 8, Line 67).

Regarding claim 6, Suzuki discloses said single-piece three dimensional top cover further comprises a decorative border [Fig. 11A; 15 and 20] constructed therein using an in mold decoration process (see Column 14, Lines 30-54).

Regarding claim 8, Suzuki discloses said digitizer comprises electrical traces and circuits along a periphery that are hidden from a user by said decorative border (see Figs. 5 and 11A).

Regarding claim 9, Suzuki discloses said single-piece three dimensional top cover has indentations to indicate button functions (see Fig. 12; Column 14, Line 55 - Column 15, Line 21).

Regarding claim 10, this claim is rejected by the reasoning applied in rejecting claim 1; furthermore, Suzuki discloses a display for an electronic device comprising: a display mechanism [Fig. 10; 1]; a single-piece three dimensional cover [Fig. 1A; 4A] that is bezel-less (see Fig. 1A) which encloses (see Fig. 12) said electronic device and is disposed over a top surface of said display mechanism and operable to allow mechanical transfer of pressure; and a resistive digitizer mechanism [Fig. 10; 4] (see Column 13, Line 50 - Column 14, Line 29) disposed beneath [Fig. 1A; 11 and 12] said cover comprising a conductive film made of indium tin oxide [Fig. 5; 11] capable of functioning in a non-planar surface (see Fig. 1A) disposed above a digitizing element [Fig. 5; 22] (see Column 10, Lines 46-52) and, responsive to said mechanical transfer of said cover, operable for registering contact between said conductive film and said digitizing element corresponding to a contact point on said cover (see Column 7, Line 42 - Column 8, Line 67).

Regarding claim 11, this claim is rejected by the reasoning applied in rejecting claim 3.

Regarding claim 13, Suzuki discloses said single-piece three dimensional cover has sufficient deflection under external pressure to cause conductive film to contact and activate said resistive digitizer mechanism (see Fig. 1A; Column 7, Line 42 - Column 8, Line 67).

Regarding claim 15, this claim is rejected by the reasoning applied in rejecting claim 6.

Regarding claim 17, this claim is rejected by the reasoning applied in rejecting claim 8.

Regarding claim 18, this claim is rejected by the reasoning applied in rejecting claim 9.

Regarding claim 19, this claim is rejected by the reasoning applied in rejecting claims 1 and 10; furthermore, Suzuki discloses a display assembly for an electronic device comprising: a display mechanism [Fig. 10; 1]; a back cover [Fig. 11C; 19]; a transparent single-piece cover [Fig. 1A; 4A] having a bezel-less (see Fig. 1A) and three-dimensional top surface which encloses (see Fig. 12) said electronic device disposed over a top surface of said display mechanism; and a resistive digitizer mechanism [Fig. 10; 4] (see Column 13, Line 50 - Column 14, Line 29) disposed beneath [Fig. 1A; 11 and 12] said transparent single-piece cover comprising a conductive film made of indium tin oxide capable of functioning in a non-planar surface (see Fig. 1A) disposed above a digitizer element [Fig. 5; 22] (see Column 10, Lines 46-52) and operable for registering a contact point on said transparent single-piece cover corresponding to a point of contact between said conductive film and said digitizing element (see Column 7, Line 42 - Column 8, Line 67).

Regarding claim 21, this claim is rejected by the reasoning applied in rejecting claim 13.

Regarding claim 22, this claim is rejected by the reasoning applied in rejecting claim 6.

Regarding claim 24, this claim is rejected by the reasoning applied in rejecting claim 8.

Regarding claim 25, this claim is rejected by the reasoning applied in rejecting claim 9.

Response to Arguments

9. Applicants' arguments filed 15 March 2006 have been fully considered but they are not persuasive.

The applicants contend the cited prior art of *Suzuki (US 6,529,188 B1)* in view of *Conroy et al (US 5,686,705 A)* neglects teaching, "a single-piece three dimensional top cover enclosing said electronic device" (see Pages 12-13 of the 'Response to Non-Final Office Action' filed 15 March 2006). However, the examiner respectfully disagrees.

The applicants take the position that Suzuki "teach[es] a touch screen without mention of an electronic device that may utilize the touch screen" (see Page 12 of the 'Response to Non-Final Office Action' filed 15 March 2006).

In response to applicants' argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "an electronic device that *may utilize* the touch screen") are not recited in the rejected claim(s). Although the

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claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Presently, instant independent claim language merely recites, "a display [assembly] for an electronic device" (see the preamble of claims 1, 10, and 19). Suzuki's Figure 12 illustrates a liquid crystal display for a portable information terminal as one example of electronic equipment (see Column 14, Lines 55-65). Furthermore, instant claim language is broad enough at present that one skilled in the art would consider the "upper and lower wires" [Fig. 1A; 55 and 56] as constituting yet another (non-limiting) example of "an electronic device" [i.e., pertaining to electrons] (see Column 7, Line 58 - Column 8, Line 2).

The applicants next take that position that, "Suzuki teaches away from the claimed embodiments by depicting a touch panel assembly with exposed sides as shown in Figure 1A" (see Page 13 of the 'Response to Non-Final Office Action' filed 15 March 2006).

In response to applicants' argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a touch panel assembly *without* exposed sides) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

The examiner also respectfully points out that both Figures 3 and 4 of the instant invention illustrate touch panel assemblies with exposed left-sides and bottom-sides. The applicants seem to be arguing that the "top cover" on its own must entirely encircle/surround/seal the electronic device. However, the very intrinsic definitional nature of "top cover" subject matter means there must somewhere else exist at least a "bottom cover." Therefore, the instant

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claim language leaves the door open for additional (top/side) cover portions to work in unison with the "top cover" so as to fully encircle/surround/seal the electronic device.

As such, Suzuki discloses a display assembly for an electronic device [Fig. 1A; 55 & 56], comprising a single-piece three dimensional top cover [Fig. 1A; 4A] enclosing (i.e., *holding in*) the electronic device (see Column 7, Line 58 - Column 8, Line 67). Wherein Suzuki's Figure 12 further illustrates one (non-limiting) example having the entire display assembly being housed / encircled / surrounded / sealed in a portable information terminal (see Column 14, Lines 55-65).

In response to applicants' argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, it would have been obvious to one having ordinary skill in the art at the time of invention to use Conroy's conductive polymer (see Column 3, Lines 9-30, Column 4, Lines 21-32, Column 5, Line 55 - Column 6, Line 10, and Column 8, Lines 37-40) as a substitute for Suzuki's conductive film (see Column 10, Line 43 - Column 11, Line 16), so as to provide a rugged and reliable electronic device (e.g., see Conroy: Column 6, Lines 2-9).

The applicants suggest that using Conroy's conductive polymer as a substitute for Suzuki's conductive film would result in an unstable "multi-layer assembly" (see Page 14 of the 'Response to Non-Final Office Action' filed 15 March 2006). However, the examiner respectfully disagrees. The "multi-layer assembly" described by Conroy (see Column 6, Lines 2-9) is in

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reference to multiple layers of conductive polymer film bonded to each other. The combined invention of Conroy and Suzuki would employ a single layer of conductive polymer film, no "multi-layer assembly" would be required.

By such reasoning rejection of the claims is deemed necessary, proper, and thereby maintained at this time.

Conclusion

10. Applicants' amendments necessitated the new ground(s) of rejection presented in this office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Piziali whose telephone number is (571) 272-7678. The examiner can normally be reached on Monday - Friday (6:30AM - 3PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bipin Shalwala can be reached on (571) 272-7681. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Jeff Piziali
12 April 2007